

O I P E JC103  
MAR 17 2003  
PATENT & TRADEMARK OFFICE

APPENDIX

The amendments and new claims are shown below.

[49. A computer system comprising:

a plurality of graspable objects, one or more graspable objects of said plurality of graspable objects having a unique visual aspect;

a surface including at least a section capable of supporting said plurality of graspable objects, said section having no predefined positions for supporting said plurality of graspable objects;

a graphical environment for a child, the graphical environment presenting a child with a visual event prompting the child to cognitively react by selecting and manipulating said one or more graspable objects in response to said event;

a detecting element proximate to at least said section of said surface;

a personal computer, including:

a loading device for loading executable code into said personal computer from an outside source;

a storage device for storing the executable code;

a processor for processing at least the executable code, and

a component within said one or more graspable objects capable of affecting an electrical change in at least a portion of said detecting element;

said processor being capable of identifying at least one of: (a) said visual aspect of said one or more graspable objects as a result of said electrical change, and (b) a position of said one or more graspable objects on said surface.]

[ 50. A computer system as recited in claim 49, wherein said detecting element comprises a wire grid.]

[51. A computer system as recited in claim 49, wherein said detecting element comprises a plurality of electrically conductive wires.]

[ 52. A computer system comprising:

    a plurality of graspable objects, one or more graspable objects of said plurality of graspable objects having a unique visual aspect and a component exhibiting a characteristic representing said visual aspect;

    a surface including at least a section capable of supporting said plurality of graspable objects, said section having no predefined positions for supporting said plurality of graspable objects;

    a graphical environment for a child, the graphical environment presenting a child with a visual event prompting the child to cognitively react by selecting and manipulating said one or more graspable objects in response to said event;

    a detecting element provided proximate to at least said section of said surface, at least a portion of said detecting element being capable of detecting said characteristic of said component;

    a first processor capable of encoding information related to at least one of: (a) said detected characteristic and (b) a position of said one or more graspable objects into a message compatible with a personal computer communication protocol;

    a second processor capable of receiving the encoded information and recognizing at least one of: (a) said visual aspect of said one or more graspable

objects as a result of said detected characteristic, and (b) a position of said one or more graspable objects on said surface.]

[ 53. A computer system as recited in claim 49, wherein said unique visual aspect comprises an alphanumeric character.]

[ 54. A computer system as recited in claim 49, wherein said unique visual aspect comprises a picture.]

[ 55. A computer system as recited in claim 49, wherein said unique visual aspect comprises a symbol.]

[ 56. A computer system as recited in claim 49, wherein said unique visual aspect comprises a color.]

[57. A computer system as recited in claim 49, wherein said detector is capable of detecting a position of said one or more graspable objects by triangulation.]

[58. A computer system as recited in claim 49, further comprising a communication link facilitating communication between the first and second processors.]

[59. A computer system as recited in claim 58, wherein said communication link is a wireless communication link.]

[60. A computer system as recited in claim 52, wherein said detecting element comprises a wire grid.]

[61. A computer system as recited in claim 52, wherein said detecting element comprises a plurality of electrically conductive wires.]

[62. A computer system as recited in claim 52, wherein said unique visual aspect comprises an alphanumeric character.]

[63. A computer system as recited in claim 52, wherein said unique visual aspect comprises a picture.]

[64. A computer system as recited in claim 52, wherein said unique visual aspect comprises a symbol.]

[65. A computer system as recited in claim 52, wherein said unique visual aspect comprises a color.]

[66. A computer system as recited in claim 52, wherein said processor comprises a central processing unit of a personal computer.]

[67. A computer system as recited in claim 52, further comprising a communication link facilitating communication between the first and second processors.]

[68. A computer system as recited in claim 67, wherein said communication link is a wireless communication link.]

[69. A computer system as recited in claim 52, wherein said detector is capable of detecting a position of said one or more graspable objects by triangulation.]

[70. A computer system comprising:

    a plurality of graspable objects, one or more graspable objects of said plurality of graspable objects having a unique visual aspect;

    a support structure including at least a section capable of supporting said plurality of graspable objects, said section having no predefined positions for supporting said plurality of graspable objects;

    a graphical environment for a child, the graphical environment presenting a child with a visual event prompting the child to cognitively react by selecting and manipulating said one or more graspable objects in response to said event;

    a detecting element proximate to at least said section of said support structure, said detecting element capable of detecting electrical, physical, radio frequency and/or magnetic characteristics associated with the one or more objects;

    a processor linked to said detecting element;

    said processor being capable of identifying at least one of: (a) said visual aspect of said one or more graspable objects based on feedback from said detecting element, and (b) a position of said one or more graspable objects on said surface.]

[71. A computer system comprising:

a plurality of graspable objects, one or more graspable objects of said plurality of graspable objects having a unique visual aspect;

a support structure including at least a section capable of supporting said plurality of graspable objects, said section having undifferentiated positions for supporting said plurality of graspable objects;

a graphical environment for a child, the graphical environment presenting a child with a visual event prompting the child to cognitively react by selecting and manipulating said one or more graspable objects in response to said event;

a detecting element proximate to at least said section of said support structure, said detecting element capable of detecting electrical, physical, radio frequency and/or magnetic characteristics associated with the one or more objects;

a processor linked to said detecting element;

said processor being capable of identifying at least one of: (a) said visual aspect of said one or more graspable objects based on feedback from said detecting element, and (b) a position of said one or more graspable objects on said surface.]

[72. A computer system comprising:

a plurality of graspable objects, one or more graspable objects of said plurality of graspable objects having a unique visual aspect;

a support structure including at least a section capable of supporting said plurality of graspable objects;

a graphical environment for a child, the graphical environment presenting a child with a visual event prompting the child to cognitively react by selecting and manipulating said one or more graspable objects in response to said event;

a detecting element proximate to at least said section of said support structure, said detecting element capable of detecting electrical, physical, radio frequency and/or magnetic characteristics associated with the one or more objects regardless of where the one or more objects are located on the section;

a processor linked to said detecting element;

said processor being capable of identifying at least one of: (a) said visual aspect of said one or more graspable objects based on feedback from said detecting element, and (b) a position of said one or more graspable objects on said surface.]

[ 73. A computer system as recited in claim 72, where said graphical environment comprises a visual image on said section of said support structure.]

[74. A computer system comprising:

a plurality of graspable objects, one or more graspable objects of said plurality of graspable objects having a unique visual aspect;

a support structure including at least a section capable of supporting said plurality of graspable objects, said section having no predefined positions for supporting said plurality of graspable objects;

a detecting element proximate to at least said section of said surface, said detecting element capable of detecting electrical, physical, radio frequency and/or magnetic characteristics associated with the one or more objects;

a personal computer, including:

a loading device for loading executable code into said personal computer from an outside source;

a storage device for storing the executable code;

a processor for processing at least the executable code, and  
an output device for presenting a user interface;  
said processor being capable of identifying at least one of: (a) said visual  
aspect of said one or more graspable objects based on feedback from said detecting  
element, and (b) a position of said one or more graspable objects on said surface.]

[75. A computer system comprising:  
a plurality of graspable objects, one or more graspable objects of said plurality  
of graspable objects having a unique visual aspect;  
a support structure including at least a section capable of supporting said  
plurality of graspable objects;  
a detecting element proximate to at least said section of said surface, said  
detecting element capable of detecting electrical, physical, radio frequency and/or  
magnetic characteristics associated with the one or more objects regardless of where  
the one or more objects are located on said section;  
a personal computer, including:  
a loading device for loading executable code into said personal  
computer from an outside source;  
a storage device for storing the executable code;  
a processor for processing at least the executable code, and  
an output device for presenting a user interface;  
said processor being capable of identifying at least one of: (a) said visual  
aspect of said one or more graspable objects based on feedback from said detecting  
element, and (b) a position of said one or more graspable objects on said surface.]

[76. A system for promoting learning in a child, comprising:  
a visual graphical environment for a child, the graphical environment  
presenting a child with one or more visual prompts, said prompts assisting to prompt  
the child to manipulate one or more graspable objects in an intended way;  
an educational appliance support structure, said support structure having a  
work space capable of receiving input from a child through the detection of the  
location of one or more graspable objects placed or manipulated on the work space;  
one or more detectors associated with the work space, the detectors being  
capable of detecting the location of the one or more graspable objects placed or  
manipulated on the work space by a child regardless of where the child places or  
manipulates the one or more graspable objects on the work space; and  
a processor capable of determining whether the location of the one or more  
graspable objects placed or manipulated on the work space corresponds to a desired  
response.]

[77. A system for promoting learning in a child as recited in claim 76,  
where said graphical environment comprises a visual image on said work space of  
said support structure.]

[78. A system for promoting learning in a child as recited in claim 76,  
further comprising audio output device capable of providing one or more audio  
prompts assisting to prompt the child to cognitively react by manipulating one or  
more graspable objects.]

[79. A system for promoting learning in a child as recited in claim 78, wherein the audio output device is further capable of providing audio feedback to the child depending on whether the location of the one or more graspable objects placed or manipulated on the work space corresponds to a desired response.]

[80. A method for promoting learning in a child comprising the steps of: presenting a visual graphical environment to a child, the graphical environment having one or more visual prompts, said prompts assisting to prompt the child to cognitively react by manipulating one or more graspable objects in an desired fashion; receiving input from a child by detecting the location of one or more graspable objects placed or manipulated on a work space comprising at least a portion of an educational appliance support structure; detecting the location of the one or more graspable objects placed or manipulated on the work space by a child regardless of where the child places or manipulates the one or more graspable objects on the work space; and determining whether the location of the one or more graspable objects placed or manipulated on the work space corresponds to a desired response.]

[81. A method for promoting learning in a child as recited in claim 80, where said graphical environment comprises a visual image on the work space.]

[82. A method for promoting learning in a child as recited in claim 81, further comprising the step of providing one or more audio prompts assisting to prompt the child to cognitively react by manipulating one or more graspable objects.]

[83. A method for promoting learning in a child as recited in claim 82, further comprising the step of providing audio feedback to the child depending on whether the location of the one or more graspable objects placed or manipulated on the work space corresponds to a desired response.]

84. A system for promoting learning in a child comprising:

    a visual graphical environment for a child, the graphical environment presenting a child with one or more visual prompts, said prompts assisting to prompt the child to cognitively react by manipulating one or more graspable objects in an desired fashion;

    an educational appliance support structure, said support structure having a work space capable of receiving input from a child through the detection of the location of one or more graspable objects placed or manipulated on the work space;

    one or more detectors associated with a work space, the detectors being capable of detecting the location of the one or more graspable objects placed or manipulated on the work space by detecting a mechanical downward force generated by the child's placement or manipulation of the one or more graspable objects on the work space; and

    a processor capable of determining whether the location of the one or more graspable objects placed or manipulated on the work space corresponds to a desired response.

85. A system for promoting learning in a child as recited in claim 84, where said graphical environment comprises a visual image on the work space.

86. A system for promoting learning in a child as recited in claim 85, further comprising audio output device capable of providing one or more audio prompts assisting to prompt the child to cognitively react by manipulating one or more graspable objects.

87. A system for promoting learning in a child as recited in claim 86, wherein the audio output device is further capable of providing audio feedback to the child depending on whether the location of the one or more graspable objects placed or manipulated on the work space corresponds to a desired response.

88. A system for promoting learning in a child as recited in claim 84, where said educational appliance includes a loadable memory.

89. A method for promoting learning in a child comprising the steps of: presenting a visual graphical environment to a child, the graphical environment having one or more visual prompts, said prompts assisting to prompt the child to cognitively react by manipulating one or more graspable objects in a desired fashion;

receiving input from a child by detecting the location of one or more graspable objects placed or manipulated on a work surface comprising at least a portion of an educational appliance support structure;

detecting the location of the one or more graspable objects placed or manipulated on the work space by detecting a mechanical downward force generated

by the child's placement or manipulation of the one or more graspable objects on the work space; and

determining whether the location of the one or more graspable objects placed or manipulated on the work space corresponds to a desired response.

90. A method for promoting learning in a child as recited in claim 89, where said graphical environment comprises a visual image on the work surface.

91. A method for promoting learning in a child as recited in claim 89, further comprising the step of providing one or more audio prompts assisting to prompt the child to cognitively react by manipulating one or more graspable objects.

92. A method for promoting learning in a child as recited in claim 91, further comprising the step of providing audio feedback to the child depending on whether the location of the one or more graspable objects placed or manipulated on the work space corresponds to a desired response.

---

93. (New) A system for promoting learning in a child comprising:  
a visual graphical environment for a child, the graphical environment presenting a child with one or more visual prompts, said prompts assisting to prompt the child to cognitively react by manipulating one or more graspable objects in an desired fashion;

an educational appliance support structure, said support structure having a work space capable of receiving input from a child through the detection of the location of one or more graspable objects placed or manipulated on the work space;

one or more detectors associated with a work space, the detectors being capable of detecting the location of the one or more graspable objects placed or manipulated on the work space; and

a processor capable of determining whether the location of the one or more graspable objects placed or manipulated on the work space corresponds to a desired response.

94. (New) A system for promoting learning in a child as recited in claim 93, where said graphical environment comprises a visual image on the work space.

95. (New) A system for promoting learning in a child as recited in claim 94, further comprising audio output device capable of providing one or more audio prompts assisting to prompt the child to cognitively react by manipulating one or more graspable objects.

96. (New) A system for promoting learning in a child as recited in claim 95, wherein the audio output device is further capable of providing audio feedback to the child depending on whether the location of the one or more graspable objects placed or manipulated on the work space corresponds to a desired response.

97. (New) A system for promoting learning in a child as recited in claim 93, where said educational appliance includes a loadable memory.

98. (New) A method for promoting learning in a child comprising the steps of:

presenting a visual graphical environment to a child, the graphical environment having one or more visual prompts, said prompts assisting to prompt the child to cognitively react by manipulating one or more graspable objects in a desired fashion;

receiving input from a child by detecting the location of one or more graspable objects placed or manipulated on a work surface comprising at least a portion of an educational appliance support structure;

detecting the location of the one or more graspable objects placed or manipulated on the work space ; and

determining whether the location of the one or more graspable objects placed or manipulated on the work space corresponds to a desired response.

99. (New) A method for promoting learning in a child as recited in claim 98, where said graphical environment comprises a visual image on the work surface.

100. (New) A method for promoting learning in a child as recited in claim 98, further comprising the step of providing one or more audio prompts assisting to prompt the child to cognitively react by manipulating one or more graspable objects.

101. (New) A method for promoting learning in a child as recited in claim 100, further comprising the step of providing audio feedback to the child depending on whether the location of the one or more graspable objects placed or manipulated on the work space corresponds to a desired response.